In the Claims

- (Canceled)
- 2. (Currently Amended) The optical transistor of claim 418, wherein said light intensity modulator region is formed on a substrate and is separated by a first terminal disposed on one surface of said substrate and a second terminal disposed on other surface of said substrate.
- 3. (Currently Amended) The optical transistor of claim + 18 wherein said light intensity modulator region is bi-stable.
- 4. (Currently Amended) The optical transistor of claim 4-18 wherein said light intensity modulator region is liquid crystal.
- 5. (Currently Amended) The optical transistor of claim 1-18 wherein said light intensity modulator region is optical crystal.
- 6. (Currently Amended) The optical transistor of claim 1/18 wherein said light intensity modulator region exhibits high gain.
- 7. (Currently Amended) The optical transistor of claim 4-18 wherein said light intensity modulator region exhibits negative gain.
- 8. (Canceled)
- 9. (Currently Amended) The optical transistor of claim 1-18 wherein said light intensity modulator region is configured for specified wavelength bands.
- 10. (Currently Amended) The optical transistor of claim 118, further comprising:
 a control light incident on at least one of said fust photo conductor region or said second photo conductor region.
- 11. (Canceled)
- 12. (Canceled)
- 13. (Canceled)
- 14. (Currently Amended) The optical transistor of claim 13-18 wherein said photo conductor regions comprise input logic operators.
- 15. (Currently Amended) The optical transistor of claim 14 wherein said second terminal comprise output logic operators.
- (Currently Amended) An array of a plurality of optical transistors of claim +18.

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- 17. (Currently Amended) An array of a plurality of optical transistors of claim 4-2 comprising:
 - a first array of said optical transistors; and
- a second array of said optical transistors with a plurality of first terminals disposed incident to a plurality of second terminals of light intensity modulator drain regions of said first array.
- 18. (New) An optical transistor comprising:
 - a light intensity modulator region; and
- a first photo conductor region and a second photo conductor region operably coupled to said light intensity modulator region for controlling said light intensity modulator region.
- 19. (New) The optical transistor of claim 18, further comprising:
- a first control light incident on said first photo conductor region, a second control light incident on said second photo conductor region, and an input light incident on said light intensity modulator region.
- (New) The optical transistor of claim 19, further comprising;
 an output light emanating from said light intensity modulator region.
- 21. (New) An array of a plurality of optical transistors comprising:
 - a first array of optical transistors; and
 - a second array of optical transistors,

wherein said optical transistors include

- a light intensity modulator region; and
- a photo conductor region operably coupled to said light intensity modulator region for controlling said light intensity modulator region.